D) Remarks:

(D-1) Remarks on Amendments to the Claims:

- [C1] line 1 of Claim 1 to Claim 10 inclusive, please replace "for transition" with "for transitioning". (examiner's comment No. 17)
- [C2] in page 22, Claim 1, paragraph 3, line 3, please insert "of said conductive plate" after 'a second broad wall'. (examiner's comment No. 18)
- [C3] in page 22, Claim 1, paragraph 3, line 4, please delete "forming" and insert "providing". (examiner's comment No. 18)
- [C4] in page 22, Claim 1, paragraph 3, second last line, please insert "the" in front of 'distance between -'. (examiner's comment No. 19)
- [C5] in page 22, Claim 1, paragraph 4, line 4 to line 6, please delete ", position of the second arm of said L-shape waveguide probe is adjusted to be substantially at a central region of the cross-section of said universal launching adapter" after 'universal conductive housing'. (examiner's comment No. 14)
- [C6] in page 23, Claim 3, line 2, please insert "the" in front of 'distance between -'. (examiner's comment No. 19)
- [C7] in page 23, Claim 3, line 4 and line 5, please delete "to increase the launching efficiency". (examiner's comment No. 15)
- [C8] in page 23, Claim 5, line 2, please insert "the" in front of 'L-shape waveguide'. (examiner's comment No. 20)
- [C9] in page 23, Claim 5, line 3, please delete "aligned to be parallel to said major wall of the universal conductive housing and". (examiner's comment No. 20)
- [C10] in page 23, Claim 5, line 6, please delete "broad" and insert "long" in front of 'inner walls'. (examiner's comment No. 16)
- [C11] in page 24, Claim 6, line 2, please insert "the" in front of 'L-shape waveguide'. (examiner's comment No. 20)
- [C12] in page 24, Claim 6, line 3, please delete "aligned to be parallel to said major wall of the universal conductive housing and". (examiner's comment No. 20)

- [C13] in page 24, Claim 6, line 5, please delete "broad" and insert "long" in front of 'inner walls'. (examiner's comment No. 16)
- [C14] in page 24, Claim 8, last line, please delete "said metal for the layer being selected from a group consisted of gold and silver". (examiner's comment No. 21)
- [C15] in page 24, Claim 9, line 2, please insert "an" in front of 'alignment of said L-shape --- '. (examiner's comment No. 22)
- [C16] in page 25, Claim 10, line 2, please insert "an" in front of 'alignment of said L-shape --- '. (examiner's comment No. 22)

(D-2) Remarks on Amendments to the Specifications:

- [1] in page 1, please move lines 2 to 19 (the last line) for Abstract of Disclosure to a new page 26 after page 25. (examiner's comment No. 1)
- [2] in page 1, after line 1, please insert "This is a divisional patent of the application serial number 09/351,362, filed by Yi-Chi Shih, Long Q. Bui and Tsuneo C. Shishido on 07/12/99, now U.S. Patent number 6,363,605 issued on 04/02/2002." (examiner's comment No. 1)
- [3] in page 4, line 6, please insert "now U.S. Patent number 6,363,605," after "on 07/12/99.". (examiner's comment No. 2)
- [4] in page 4, line 1, after "US patent" please insert "number 6,363,605" and delete "application No. 09/351,362". (examiner's comment No. 2)
- [5] in page 7, second last line, please insert "now U.S. Patent number 6,363,605" after '09/351,362 ". (examiner's comment No. 2)
- [6] in page 5 last line to page 5 first line (Figure 1), please delete "With the prior art waveguide probe (38), electric field polarization of the microwave signals excited is always perpendicular to the major exterior wall (28a)." (examiner's comment No. 3)
- [7] in page 6, line 4 (Figure 2), please delete "(41)" and "(42)". (examiner's comment No. 3)
- [8] in page 6, line 6 (Figure 3), please delete "(40)", line 6 to line 8, please delete "Using the L-shape waveguide probes provided in this invention, microwave signals with electric

- field polarizations parallel to the major exterior wall (28a) can be easily obtained." (examiner's comment No. 3)
- [9] in page 6, line 8 please delete "(51')". (examiner's comment No. 3)
- [10] in page 6, line 13 (second last line for Figure 3), after 'a slot' please delete "(54a)" and insert "(54s)". (examiner's comment No. 13)
- [11] in page 6, caption for Figure 4, last line, please delete "(66, 66b')". (examiner's comment No. 3)
- [12] in page 6, caption for Figure 5, line 1 please delete "(20)", line 2 please delete "(40)" and "(80)". (examiner's comment No. 3)
- [13] in page 7 line 14 (last line for paragraph 1), please insert "of Fig. 1(b)" after "(24) ". (examiner's comment No. 4)
- [14] in page 8, line 16 (last line of second paragraph), please insert "(39)" after 'microwave signals '. (examiner's comment No. 5 and No. 13)
- [15] in page 8, line 25, please delete "application No. 09/351,362, filed 07/12/99" and insert "number 6,363,605". (examiner's comment No. 2)
- [16] in page 10, line 5, please insert "(7)" after 'of pin -'. (examiner's comment No. 5)
- [17] in page 10, last line, please insert ", a major exterior wall (28a)" after '--walls (20b)' (examiner's comment No. 13)
- [18] in page 10, last line, please insert "There are threaded holes (20a) for the mounting of a waveguide section. The long axis (42a) of the second arm (40) of an L-shape non-symmetrical waveguide probe is aligned to be substantially parallel to the major exterior wall (28a)." after 'metals or alloys.' (examiner's comment No. 13)
- [19] in page 11, line 3, please replace "51" by "51". In the same line 3, please insert "or 51 in Fig. 3(d)" after 'Fig. 3(b) -'. (examiner's comment No. 5)
- [20] in page 11, line 9, please insert ", which has two broad waveguide walls (56). It is noted that the universal launcher adaptor (51) is similar to the universal launcher adaptor (51') except that the long walls (55) for (51) are perpendicular the long walls (55) of (51')" after 'waveguide section (50) used'. (examiner's comment No. 13)
- [21] in page 11, line 9, please replace "54a" with "54s", "Fig. 3(d)" with "Fig. 3(e)" (examiner's comment No. 13 and No. 7)

- [22] in page 11, line 21 (last line of paragraph 2), please insert ")" after 'Fig. 2(d)'. (examiner's comment No. 6)
- [23] in page 12, second last line, please replace "54a" with "54s". (examiner's comment No. 8)
- [24] in page 13, line 3, please insert "in Fig. 2" after 'the second arm -'. (examiner's comment No. 9)
- [25] in page 14, line 20 and line 21, please replace "footrests" with "photoresist". (examiner's comment No. 10)
- [26] in page 15, paragraph 2, line 6, please replace "FeCl3" with "FeCl3". (examiner's comment No. 11)
- [27] in page 16, line 1, please insert "Here, L-shape waveguide probes (40) are created by the etching." After 'after the etching.' (examiner's comment No. 13)
- [28] in page 16, line 8, please insert "It is noted that one slot (67) has been created for each L-shape waveguide probe for alignment purposes." after 'fine brass wires (66, 66b').' (examiner's comment No. 13)
- [29] in page 16, last line, please insert "in Fig. 4(a)" after '(64, 65)'. (examiner's comment No. 12)

(D-3) Remarks on Amendments to Figure 1(b) and Figure 3(e):

- [F1] in Figure 1(b), label '48' has been changed to '39'.
- [F2] in Figure 3(e), label '54a' has been changed to '54s' to avoid confusion with width '54a' in Figure 3(d).

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The disclosure is objected to because of the following informalities: At page 1 of the revised specification, all written description thereat should be deleted except for the Title and the reference to the parent application such as to be commensurate with US practice. At all occurrences throughout the specification, updated status information for co-pending US patent application No. "351362" should be provided (e.g. at p. 4, ls 5, 12, etc). Pages 5, 6, in the "Brief The disclosure is objected to because of the following informalities: At page 1 of the application No. "351362" should be provided (e.g. at p. 4, ls 5, 12, etc). Pages 5, 6, in the "Brief Description of the Drawings", note that all reference numbers therein should be deleted as being No.3 unnecessary, and extraneous descriptions associated with "Fig. 1(b)" and "Fig. 3(a)" should be deleted as being inappropriate for the "Brief Description". Page 7, line 14, note that -- of Fig. $N_0.4 \rightarrow 1$ (b)-- should follow "(24)" for clarity of description. Page 10, line 5, note that "(7)" should No. 5 follow "pin" for clarity. Page 11, line 3, note that reference to the adapter "(51, Fig. 3(b))" is No.6 inconsistent with the "Fig. 3(b)" labeling; line 21, note that a --)-- should follow "3(d)" for No.7 — clarity. Page 12, second line from bottom, note "a precision slot (54a)" is not consistent with No. 8 "width (54a)", e.g. p.11, 1.7 and thus needs clarification. Page 13, line 3, note that --in Fig. 2-- $N_0.9$ should follow "42a" for clarity. Page 14, lines 20, 21, note that reference to "footrest layer" is $N_{0.10}$ vague in meaning and note that "footrests layer (61)" is not consistent with "photoresist layer" $N_0.11 \rightarrow (61)$ at p. 14, 1.23. Page 15, seventh line from bottom, note that "FeC13" should correctly be --FeCl₃--. Page 16. last line, note that --in Fig. 4(a)-- should follow "65" for clarity. Appropriate correction is required.

The disclosure is objected to because of the following informalities: Note that the following reference labels need explicit description relative to the corresponding drawing figures:

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Fig. 1(b), (48, E-field); fig. 1(c), (15, 16, 30); Fig. 3(a), (E-field, 20, 20a, 42a); fig. 3(c), (56); fig. $\sqrt{5}$. (3) 4(c), (40.69); fig. 4(d), (40, 67). Moreover, at pages 11-13, regarding the description of Figs. 3(b), 3(c), 3(d), 3(e), note that the reference labels therein need to be explicitly described relative the drawing figure(s) in which they actually appear for consistency of description.

Appropriate correction is required.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the universal launching adapter (e.g. 51, 51') being mounted to the major wall of the housing such that the L-shape probe is at a central region (e.g. cl1) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

> A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abevance.

Claims 3, 5, 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, note that the comparative recitation "increase the launching efficiency" has no No.15 meaning absent any reference to a base or standard "launching efficiency". Clarification is

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In claims 5, 6, note that "the two broad inner walls of said universal launching adapter" No.16 Llacks strict antecedent basis.

The following claims have been found objectionable for reasons set forth below:

In the preamble of each claim, note that "for transition" should be rephrased as --for No.17 transitioning-- for a proper characterization.

In claim 1, third paragraph, third line note that -- of said conductive plate-- should follow each occurrence of "broad wall"; third paragraph, fourth line, "forming" should be rewritten as -providing-- for a proper apparatus recitation: third paragraph, 8th line, and fourth paragraph,
fourth line, note that --the-- should precede "distance" and "position", respectively.

No.19 In claim 3, note that --the-- should precede "distance".

In claims 5, 6, second line of each claim, note that --the-- should precede "L-shape"; third line of each claim, note that "aligned to be parallel to said major wall of the universal conductive housing and" appears to be a redundant recitation (i.e. see claim 1) and thus is not further limiting and therefore should be deleted.

In claims 7, 8, it is unclear where support for the probe thickness as recited in claim 7 and

No. 21 the conductive probe material as recited in claim 8 can be found in the specification.

In claims 9, 10, second line of each claim, note that --an-- should precede "ali clarity. In claims 9, 10, second line of each claim, note that --an-- should precede "alignment" for

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Shih et al is the parent application. Agrawal et al pertains to an L-shape coupling probe between a waveguide and a planar circuit Russell et al pertains to coupling between an IC circuit in a housing and a waveguide.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 308-4902.

BENNY T. LEE PRIMARY EXAMINER ART UNIT 2817 Lee/ek

05/23/03